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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,232	07/30/2001	Daniel Watkins	A4-4265/1C/1C 1496.00002c	4958
22501 7590 09/17/2008 CHRISTOPHER P MAIORANA, PC LSI Corporation 24840 HARPER SUITE 100 ST CLAIR SHORES, MI 48080			EXAMINER BROWN, RUEBEN M	
			ART UNIT 2623	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/918,232	Applicant(s) WATKINS, DANIEL	
	Examiner REUBEN M. BROWN	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8,12-16,19 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8,12-16,19 and 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection.

Regarding the arguments against claim 12, the claimed '*plurality of decoder control circuits within the control server*' corresponds with the plurality of CO Buffer 44 in Gelman. Gelman teaches that each CPE 70 is assigned to its own CO buffer 44, col. 5, lines 24-65. The video programming is supplied to the CPE 70/decoder 73 via the CO buffer 44. Therefore the combination of the CO buffer 44 of Gelman & the JAVA byte codes of Deutsch controls the respective first decoder circuit within the remote device, as claimed.

Regarding the arguments against claims 22-24, it is pointed out that the claims merely require that the second decoder or supplemental decoder is capable of decoding & decompress different than the first decoder circuit. Since the teaching of Sokawa includes a supplemental decoder other than an MPEG decoder, the requirements of the claim is met. As for additional decoder circuit of claim 24, the additional decoder circuit reads on the image processor of Sokawa, in combination with one or more of the NTSC decoder 1015, MUSE decoder 1016 & digital decoder 1017.

Specification

The amendments the Specification have been entered. The objection to the Specification is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 6, 14, 21 & 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman, (U.S. Pat # 5,341,474), in view of Deutsch, (U.S. Pat # 6,631,403).

Considering claims 1 & 14, the claimed apparatus comprising or method for distributing video;

'drive server configured to present one or more compressed data streams', is met by the operation of the Information Warehouses (IWH 10) see col. 6, lines 4-60 & Fig. 2. Gelman teaches that the IWH 10 includes archival storage 12, which stores video data to be transmitted to requesting subscriber(s).

'control server separate from the driver server configured to present a particular one of the one or more data streams received from the drive server on a particular one of a plurality of busses as determined by a particular one of one or more busses as determined by a particular of the request signals', is met by the Control Office (CO 40) that includes a CO service processor(CO-SP 41) which manages the distribution of scripts, maps and information programs to an appropriate CO buffer 44, located within the CO 40, see col. 6, lines 61-67 thru col. 7, lines 1-29.

As for the further claimed feature of, *'compressed data streams'*, Gelman furthermore teaches that the video programs are stored/transmitted in an MPEG compressed format at the IWH 10, col. 10, lines 19-67 & col. 11, lines 21-25, which meets the claimed subject matter.

'one or more remote devices connected to the busses, such that the remote devices are disposed in a separate room from the drive server and control server, such that the decoder devices are configured to decode and decompress at least one or more compressed data streams and generate at least one of a decoded audio and video signal', the disclosure in Gelman discloses CPE 70 which comprises a decoder 73 that decodes received video programs back to their original form, i.e., analog form, col. 7, lines 51-56. Gelman teaches that the IWH 10 encodes and compresses the video programming, therefore the decoder 73 necessarily provides for decoding and decompression.

As for the newly added feature of, *'the remote devices comprising a first decoder circuit and a control circuit'*, the claimed remote device reads on the CPE 70, whereas *'the decoder circuit'* is met by the decoder 73.

As for the amended subject matter of *'one or more navigation software modules executable on the control server, configured to generate control signals that program a respective one or more of the first decoder circuits, in response to one or more options entered at the respective remote device'*, the CO buffer 44 in Gelman which buffers video programming to be transmitted to a subscriber and which allows the subscriber to navigate the instant video program using VCR-like controls, see col. 8, lines 1-27; col. 9, lines 5-55 & col. 12, lines 5-67. Gelman goes on to teach that the CO buffer 44 transmits various instruction signals to the CPE 70 that control the operation of the instant CPE 70, see Fig. 4; col. 7, lines 45-54; col. 11, lines 61-64; col. 12, lines 36-64.

However, even though Gelman clearly transmits programming instruction to the CPE 70, apparently the reference only specifically discloses transmitting the instant programming instructions to the graphics overlay processor 74, and not to the decoder 73, see col. 6, lines 9-14; col. 10, lines 21-34; col. 10, lines 6-68. Nevertheless Deutsch provides a teaching of system that transmits JAVA program modules to a client terminal that programs the decoder of the instant client terminal, Abstract. Deutsch teaches that MPEG-J Java byte codes may be downloaded to a STB, col. 4, lines 25-57; col. 7, lines 55-61. When executed by the instant STB, the Java modules program the decoder to perform a variety of functions, col. 4, lines 58-65; col.

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6, lines 42-52; col. 7, lines 38-45; col. 8, lines 52-56; col. 14, lines 49-67, including decoding a received A/V stream according to a particular predetermined protocol. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Gelman with the feature of downloading decoding instructions to a receiver as taught by Deutsch, at least for the desirable improvement of utilizing more dynamic decoding algorithms without having physically change the hardware each time.

As for the additional claimed feature of, *'each of the navigational software modules being configured to parse a respective one of the one or more compressed data stream'*, the subject matter is met by the discussion in Gelman that the CO buffer 44 includes software that traverses the video program, at least in a Forward or Reverse search, see Fig. 4; col. 9, lines 7-55; col. 11, lines 21-67 thru col. 12, lines 1-67 & col. 13, lines 1-31.

Considering claim 2, Gelman teaches that the user controls the display of the video program, using a remote control 75, col. 7, lines 36-41.

Considering claim 14, the elements of an apparatus comprising a drive server, or a method for distributing video, comprises elements that correspond with subject matter mentioned above in the rejection of claim 1 and is likewise treated.

Considering claims 21 & 25, Gelman teaches that the subscriber is enabled to place a fast forward request of the received video program, col. 12, lines 55-67.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman & Deutsch, in view of Beyers, (U.S. Pat # 5,155,590).

Considering claim 4, Gelman does not discuss any procedure for the server to place any of the decoders in a diagnostic mode. Nevertheless Beyers, which is in the same field of endeavor as Gelman of distributing video programming over a network, discloses the headend transmitting instructions signals that causes a subscriber equipment to operate a diagnostic procedure of transmitting various current operating parameters back to the headend, col. 33, lines 1-57; col. 34, lines 1-34; col. 46, lines 19-34. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Gelman with the feature of transmitting instruction from a headend to a local subscriber equipment to operate in diagnostic mode, at least for the desirable advantage of remotely controlling/calibrating the subscriber equipment, to insure its proper operations, as taught by Beyers, col. 7, lines 9-67.

5. Claims 5, 12-13, 16 & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman & Deutsch, in view of Maeda, (U.S. Pat # 6,556,546).

Considering claims 5 & 16 even though Gelman teaches that video programming may at least be stored on magnetic disk storage technology, the reference does not explicitly discuss the use of DVD technology. However, Maeda discloses the advantages of using DVD technology for

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storing video programming, col. 4, lines 1-65. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Gelman with the feature of DVD technology, at least for the desirable advantage that it is a known standard storage medium for storing MPEG data and for its properties using the IEEE 1394 bus system, as taught by Maeda, (col. 1, lines 14-56 & col. 2, lines 1-51).

Considering claim 12, the claimed elements of an apparatus that correspond with subject matter mentioned above in the rejection of claim 1, are likewise treated. Gelman teaches that video programming may at least be stored on magnetic disk storage technology, but the reference does not explicitly discuss the use of DVD technology. However, Maeda discloses the advantages of using DVD technology for storing video programming, col. 4, lines 1-65. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Gelman with the feature of DVD technology, at least for the desirable advantage that it is a known standard storage medium for storing MPEG data and for its properties using the IEEE 1394 bus system, as taught by Maeda, (col. 1, lines 14-56 & col. 2, lines 1-51). Therefore the claimed plurality of DVD bitstreams reads on the combination of Gelman & Maeda.

The claimed *'plurality of decoder control circuits within the control server'* corresponds with the plurality of CO Buffer 44 in Gelman. Gelman teaches that each CPE 70 is assigned to its own CO buffer 44, col. 5, lines 24-65. The video programming is supplied to the CPE 70/decoder 73 via the CO buffer 44. Therefore the combination of the CO buffer 44 of Gelman

& the JAVA byte codes of Deutsch controls the respective first decoder circuit within the remote device, as claimed.

Considering claim 13, the claimed, *'navigation software configured to generate one or more control signals'*, reads on the operation of the CO buffer 44, see Gelman col. 11, lines 26-68; col. 12, lines 1-68. The claimed, *'decoder devices configured to generate the at least one of the decoded audio/video signals in response to the one or more control signals'*, reads on the CPE 70/decoder 73.

Considering claim 26, the claimed feature of, *'parsing the DVD bitstreams with the navigation software modules'*, is met by the citations in Gelman discussed with respect to subject matter of claim 13 above, and the disclosure of DVD technology, discussed in Maeda.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman & Deutsch, further in view of Dixon, (U.S. Pat # 5,935,206).

Considering claim 6, Gelman does not explicitly discuss whether the system transmits a movie from the IFW 10 to a plurality of subscribers, using the same compressed data stream. Nevertheless Dixon, which is in the same field of endeavor, teaches that when a request is made for a movie, the server determines whether the number of viewers of the assigned to receive the movie from a particular asset exceeds a predetermined threshold. If the number has not exceeded a predetermined threshold, then the viewer is assigned to receive the movie from an asset or copy

of the movie that will serve the plurality of viewers already assigned to the particular asset. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Gelman with the feature of providing a particular movie to a plurality of subscriber from the same copy of the movie, at least for the advantage of reducing the number of copies of the movie that needs to be made, by avoiding the need to make a copy of the movie for every single requester, of the instant movie.

7. Claims 8 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman & Deutsch, in view of Akamatsu, (U.S. Pat # 7,257,132).

Considering claims 8 & 15, Gelman only discusses transmitting the compressed video streams over a broadband network, col. 5, lines 11-65. Nevertheless, Akamatsu provides a teaching of transmitting a digital compressed video program using broadband network that is received by receiver 100, which then distributes the instant digital compressed video program to one or more digital receivers 110a-110c, using IEEE 1394 or a USB connection, see Fig. 1; col. 6, lines 7-25. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Gelman with the feature of transmitting video programming over a USB or IEEE 1394 connection, at least for the known benefit of distributing one or more video programs in a local environment, as discussed by Akamatsu, Col. 1, lines 21-52.

8. Claims 22-24 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman & Deutsch, in view of Sokawa (U.S. Pat # 6,353,460).

Considering claims 22 & 28, Gelman only discusses that the system transmits video programming in MPEG format to the subscriber, which is subsequently decoded by the decoder 73, see Fig. 3; col. 7, lines 51-56 & col. 10, lines 21-66. However Sokawa, which is in the same field of distributed programming discloses a subscriber receiving equipment with a plurality of decoding elements, (i.e., NTSC decoder 1015, MUSE decoder 1016 & digital decoder 1017) such that each one is enabled to decode video programming in a different format, which meets the claimed subject matter, see Fig. 1; col. 11, lines 1-65. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Gelman with the feature of a subscriber terminal with a plurality of decoding elements, for the desirable advantage of allowing the subscriber to receive and view a wider range of video programming and/or from other sources than disclosed by Gelman, as taught by Sokawa, col. 1, lines 5-42 & col. 4, lines 35-60.

Considering claim 23, the claimed feature of a '*supplemental decoder*' reads on the format conversion section 1100, which receives video in a certain format and converts/processes the video to be displayed into a predetermined format by display device 1050, see Sokawa col. 14, lines 4-36.

Considering claim 24, the claimed *'supplemental decoder circuit'* corresponds with the combination of image processor 1040/1041 and NTSC decoder 1015, MUSE decoder 1016 or digital decoder 1017, Fig. 1 & Fig. 2. The claimed, *'state machine configured to control a plurality of read operations and plurality of write operations sent to the additional decoder circuits'*, also reads on the operation of the CPU 1020 which controls operations of the image processor 1040/1041. The statements of Sokawa, col. 12, lines 15-51 & col. 14, lines 17-25, which reads, "The two video signals selected by the selection circuit 1031 are supplied to the image processor", meets the claimed *'write operations'*. Furthermore, the disclosure from the above passage in Sokawa: "The image processor 1041 reads programs corresponding to the formats of the two video signals selected by the selection circuit 1031 from the program memory 1045 in accordance with a control signal from the CPU 1020, to execute the programs, which controls the decoder(s) just mentioned. This converts the formats of the two video signals selected by the selection circuit 1031 in to predetermined display format which can be displayed by the display device 1050", meets the claimed, *'read operations'*.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman, Deutsch & Maeda, further in view of Sokawa.

Considering claim 27, Gelman only discusses that the system transmits video programming in MPEG format to the subscriber, which is subsequently decoded by the decoder 73, see Fig. 3; col. 7, lines 51-56 & col. 10, lines 21-66. However Sokawa, which is in the same field of distributed programming discloses a subscriber receiving equipment with a plurality of

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decoding elements, (i.e., NTSC decoder 1015, MUSE decoder 1016 & digital decoder 1017) such that each one is enabled to decode video programming in a different format, which meets the claimed subject matter, see Fig. 1; col. 11, lines 1-65. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Gelman with the feature of a subscriber terminal with a plurality of decoding elements, for the desirable advantage of allowing the subscriber to receive and view a wider range of video programming and/or from other sources than disclosed by Gelman, as taught by Sokawa, col. 1, lines 5-42 & col. 4, lines 35-60.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Krishnamoorthy Teaches downloading software to a STB that program the STB.

B) Yamada Teaches downloading instruction the program a decoder.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this action should be mailed to:

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or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-7290 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization

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where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown

/Chris Kelley/
Supervisory Patent Examiner, Art Unit 2623